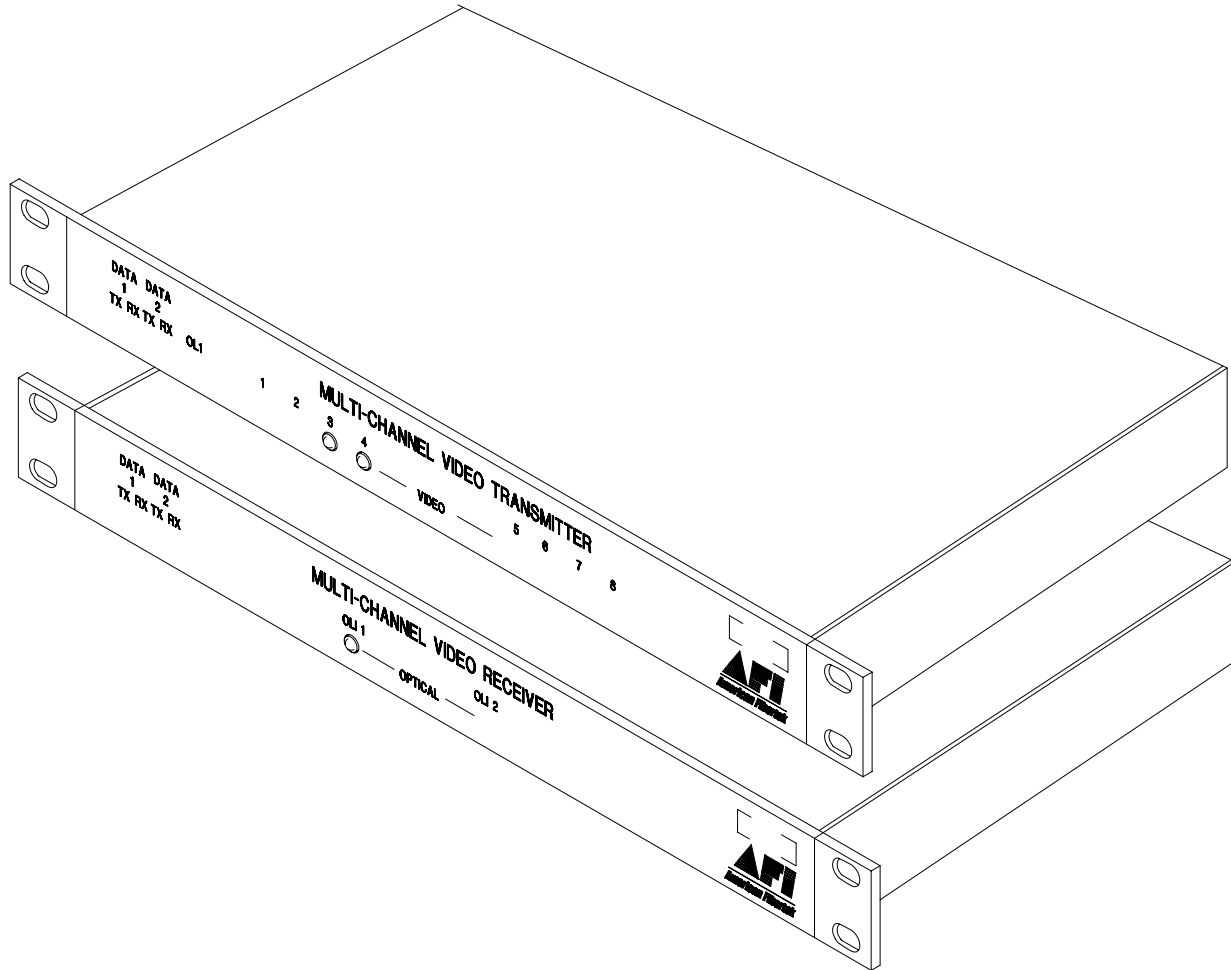




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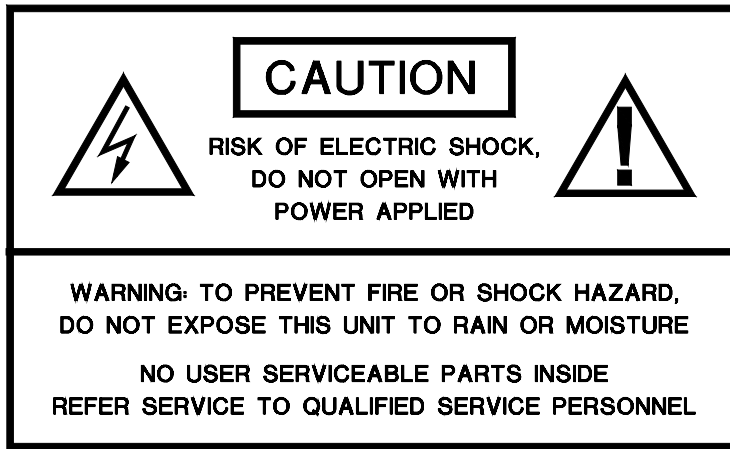


Instruction Manual

MRT-820C

MRR-820C

Two Channel Video Multiplexer



**This unit complies with 21 CFR
1040.10 and 1040.11**

INSTALLATION AND OPERATION INSTRUCTIONS

INTRODUCTION

Thank you for purchasing your American Fibertek Series 820C multimode two channel video multiplexer. Please take a few minutes to read these installation instructions in order to obtain the maximum performance from this product.

FUNCTIONAL DESCRIPTION

The 820C Series units operate as a transmitter / receiver pair for the transmission of two simultaneous, real time baseband NTSC/PAL video signals over one multimode fiber optic cable.

The MRT-820C transmitter accepts up to two video inputs and multiplexes these signals onto a single optical output port for connection to the fiber transmission system. Correspondingly, the MRR-820C receiver converts the optical signal to two independent video output signals.

The 820C Series units operate on 50 um or 62.5 um multimode fiber. Refer to the data sheets for detailed performance specifications.

The individual units may be configured for rack mounting or wall mounting depending upon the position of the included mounting hardware.

INSTALLATION

THIS INSTALLATION SHOULD BE MADE BY A QUALIFIED SERVICE PERSON AND SHOULD CONFORM TO THE NATIONAL ELECTRICAL CODE, ANSI/NFPA AND LOCAL CODES.

To install the MRT-820C or MRR-820C it is first necessary to mount the rack flanges to the unit.

For rack mounting the ears are installed on the sides of the unit with the surfaces that have oval holes flush with the front of the unit as in Figure 1. Mount the ears with the #10 flathead screws provided. To mount in the rack cabinet, use mounting screws that are appropriate for the rack cabinet being used.

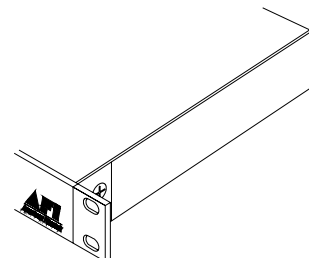


Figure 1. Rack Mount Configuration

For mounting the unit flush to a wall or other rigid surface, the ears may be installed on the sides with the oval holes flush with the bottom of the unit as in Figure 2. Mount the ears with the #10 flathead screws provided. Mount the unit to a rigid surface using #10 (5mm) screws.

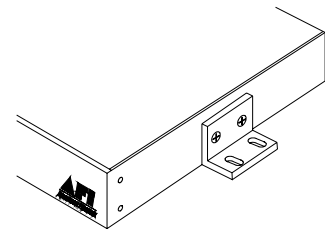


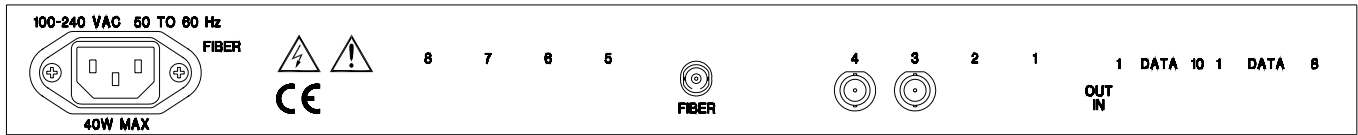
Figure 2. Wall Mount Configuration

POWER SOURCE

The internal power supply accepts universal line voltage. Any mains supply from 100 to 240 VAC, 50 to 60 Hz, may be used without modification or adjustment. A universal power connector is provided on the rear of the unit to facilitate connection to the power mains.

POWER CONNECTION

The unit is supplied (in the US and UK only) with a three conductor power cord. The “ground” conductor is directly connected to the chassis.



INPUT / OUTPUT CONNECTIONS

The fiber optic connection is made via a ST connector located on the back of the unit. Be sure to allow sufficient room for the required minimum bend radius of the fiber cable used.

Video input and output connections are located on the rear of the unit. A BNC connector is provided for each channel. Please note that video channels one, two, and five through eight are not used in this unit. The video inputs are connected to an appropriate 75Ω baseband video source such as a camera or a video recorder output. The 75Ω video outputs can be looped through typical baseband video inputs of switchers, recorders and other equipment as required. For proper operation, the outputs must be terminated with 75Ω. For optimum performance the video cables should be the shortest length of coax practical.

MRT-820C STATUS INDICATORS

The MRT-820C transmitter provides the following front panel LED status indicators to aid in installation and troubleshooting:



VIDEO

A bi-color LED indicator is provided for each of the two video channel inputs. Please note that video channels one, two, and five through eight are not used in this unit. AC power and video status associated with each of these LEDs are summarized below.

Video Presence LED	AC Power Status	Video Status
Green	On	Proper Input Video Present
Red	On	Input Video Not Detected
Off	Off	Check Power Supply Input

MRR-820C STATUS INDICATOR

The MRR-820C receiver provides the following front panel LED status indicator to aid in installation and troubleshooting:



OLI 1

A bi-color LED indicator monitors the power of the optical input signal that is being received at the MRR-820C from video channels three and four of the MRT-820C. AC power and optical input status associated with this LED are summarized below.

Optical Level Indicator	AC Power Status	Optical Status
Green	On	Proper Optical Input Power Present
Red	On	Optical Input Not Detected
Off	Off	Check Power Supply Input

LIFETIME WARRANTY INFORMATION

American Fibertek, Inc warrants that at the time of delivery the products delivered will be free of defects in materials and workmanship. Defective products will be repaired or replaced at the exclusive option of American Fibertek. A Return Material Authorization (RMA) number is required to send the products back in case of return. All returns must be shipped prepaid. This warranty is void if the products have been tampered with. This warranty shall be construed in accordance with New Jersey law and the courts of New Jersey shall have exclusive jurisdiction over this contract. **EXCEPT FOR THE FOREGOING WARRANTY, THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, EXPRESSED OR IMPLIED, WHICH EXTENDS BEYOND THE WARRANTY SET FORTH IN THIS AGREEMENT.** In any event, American Fibertek will not be responsible or liable for contingent, consequential, or incidental damages. No agreement or understanding, expressed or implied, except as set forth in this warranty, will be binding upon American Fibertek unless in writing, signed by a duly authorized officer of American Fibertek.

SERVICE INFORMATION

There are no user serviceable parts inside the unit.

In the event that service is required to this unit, please direct all inquiries to:

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